

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
4 October 2001 (04.10.2001)

PCT

(10) International Publication Number  
WO 01/72387 A1

(51) International Patent Classification<sup>7</sup>: A63F 13/00,  
G07F 17/34

(72) Inventors; and

(75) Inventors/Applicants (for US only): BENNETT,  
Nicholas, Luke [AU/AU]; CJ-71 Longueville Road, Lane  
Cove, NSW 2066 (AU). BRYANT, Natalie [AU/AU];  
CJ-71 Longueville Road, Lane Cove, NSW 2066 (AU).

(21) International Application Number: PCT/AU/01/00323

(22) International Filing Date: 23 March 2001 (23.03.2001)

(25) Filing Language: English

(74) Agent: F B RICE & CO; 605 Darling Street, Balmain,  
NSW 2041 (AU).

(26) Publication Language: English

(81) Designated States (national): AU, JP, NZ, US, ZA.

(30) Priority Data:  
PQ 6637 31 March 2000 (31.03.2000) AU

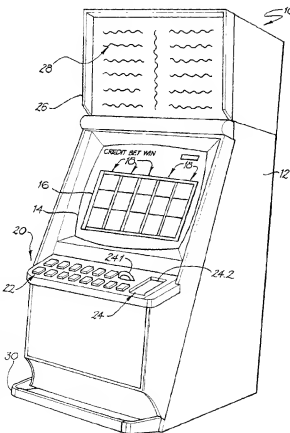
Published:

— with international search report

(71) Applicant (for all designated States except US): ARIS-  
TOCRAT TECHNOLOGIES AUSTRALIA PTY LTD  
[AU/AU]; 71 Longueville Road, Lane Cove, New South  
Wales 2066 (AU).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: GAMING MACHINE WITH A FIXED WILD SYMBOL



(57) Abstract: A gaming machine has a display and a game controller arranged to control images displayed on the display. The game controller is arranged to play a spinning reel game wherein one or more random events are caused to be displayed on the display and, if a predefined winning event occurs, the machine awards a prize. When at least one special symbol appears on the display, the special symbol is held in a superimposed representation in that position for at least one further game while at least that reel carrying the special symbol is re-spun for the at least one further game.

WO 01/72387 A1

## *Gaming machine with a fixed wild symbol*

### **Field of the Invention**

This invention relates to a gaming machine. More particularly, the invention relates to a gaming machine and to an improvement to a game played on such a gaming machine.

### **Background to the Invention**

Players who regularly play gaming machines quickly tire of particular games and therefore it is necessary for manufacturers of these machines to develop innovative game features which add interest to the games. In so doing, it is hoped to keep players amused and therefore willing to continue playing the game as well as to attract new players.

Also, with the growth that has occurred in the gaming machine market, there is intense competition between manufacturers to supply various existing and new venues. When selecting a supplier of gaming machines, the operator of a venue will often pay close attention to the popularity of various games with their patrons. Therefore, gaming machine manufacturers are keen to devise games which are popular with the players as a mechanism for improving sales, retaining customers and attracting new customers.

### **Summary of the Invention**

According to the invention, there is provided a gaming machine having a display means and a game control means arranged to control images displayed on the display means, the game control means being arranged to play a spinning reel game wherein one or more random events are caused to be displayed on the display means and, if a predefined winning event occurs, the machine awards a prize, the gaming machine being characterized in that, when at least one special symbol appears on the display means, said at least one special symbol is held in a superimposed representation in that position for at least one further game while at least that reel carrying the, or each, special symbol is re-spun for said at least one further game.

The invention is intended particularly for spinning reel-type games and, more specifically, video simulations of such games. The at least one special symbol may be carried into position on one of the reels and may remain in position to be superimposed over an underlying symbol of that reel

when the reel is re-spun. The special symbol may be at least partially transparent so that an underlying symbol is visible beneath it.

It will be appreciated that more than one special symbol may appear at any one time and more than one special symbol may remain in its position for a series of games.

In one embodiment of the invention, said at least one special symbol, when it occurs in a bought, base game may be held for a predetermined number of succeeding bought, base games.

In another embodiment of the invention, each special symbol may be held following the occurrence of a predetermined trigger condition, the trigger condition being associated with the special symbols and the trigger condition commencing a series of free games during which all special symbols that are spun up are held. Thus, for example, special symbols may only be held when three or more of the special symbols have been spun up.

Instead, some other trigger condition, independent of the special symbols, may commence a series of free games during which all special symbols that are spun up are held.

The held special symbols may be superimposed over the underlying spinning reels when the reels are spun for succeeding games in the series of free games.

Any special symbol spun up in any one game of the series of free games may be held for a predetermined number of following games in the series of free games. Thus, for example, each special symbol may be held for the following ten free games in the series of free games.

Further, if the trigger condition re-occurs in one of the games of the series of free games, a further series of free games may be awarded. The free games of the further series of free games may be added to any remaining games of a preceding series of free games. Any special symbol held during a game of said preceding series of free games may also be held for at least certain games of the further series of free games.

### **Brief Description of the Drawings**

The invention is now described by way of example with reference to the accompanying diagrammatic drawings in which:-

Figure 1 shows a three dimensional view of a gaming machine, in accordance with the invention;

Figure 2 shows a block diagram of a control circuit of the gaming machine;

Figures 3a to 3f show screen displays of an embodiment of a game played on the gaming machine of Figure 1;

5        Figure 4 shows a screen display of a base game of a game, in accordance with another embodiment of the invention, which is played on the gaming machine of Figure 1;

Figures 5a to 5c show screen displays of free games following the base game of Figure 4;

10       Figure 6 shows a flow chart of the embodiment of the invention shown in Figures 3a to 3f; and

Figure 7 shows a flow chart of the embodiment of the invention shown in Figures 4 and 5a to 5c.

#### 15       **Detailed Description of the Drawings**

In Figure 1, reference numeral 10 generally designates a gaming machine, including a game, in accordance with the invention. The machine 10 includes a console 12 having a video display unit 14 on which a game 16 is played, in use. The game 16 is a spinning reel game which simulates the rotation of a number of spinning reels 18. A midtrim 20 of the machine 10 houses a bank 22 of buttons for enabling a player to play the game 16. The midtrim 20 also houses a credit input mechanism 24 including a coin input chute 24.1 and a bill collector 24.2.

20       The machine 10 includes a top box 26 on which artwork 28 is carried. The machine 10 includes paytables, details of bonus awards, etc.

A coin tray 30 is mounted beneath the console 12 for cash payouts from the machine 10.

Referring now to Figure 2 of the drawings, a control means or control circuit 32 is illustrated. A program which implements the game and user interface is run on a processor 34 of the control circuit 32. The processor 34 forms part of a controller 36 which drives the screen of the video display unit 14 and which receives input signals from sensors 38. The sensors 38 include sensors associated with the bank 22 of buttons and touch sensors mounted in the screen. The controller 36 also receives input pulses from the mechanism 24 indicating that a player has provided sufficient credit to commence playing. The mechanism 24 may, instead of the coin input chute 24.1 or the

bill collector 24.2, or in addition thereto, be a credit card reader (not shown) or any other type of validation device.

Finally, the controller 36 drives a payout mechanism 40 which, for example, may be a coin hopper for feeding coins to the coin tray 30 to make a pay out to a player when the player wishes to redeem his or her credit.

Referring now to Figures 3a to 3f of the drawings, a first embodiment of the game 16 played on the gaming machine 10 is described.

In the game 16, it is assumed that a special symbol, indicated as a bonus symbol 42 in Figures 3b to 3f of the drawings, is a substitute symbol which substitutes for all other symbols and that left-to-right pays apply. Also, in the example described below with reference to Figures 3a to 3f of the drawings, it is assumed that five standard paylines are being played.

When the player places a bet, the relevant button of the bank 22 of buttons is actuated to simulate spinning of the reels 18. When the reels 18 stop spinning, any prize winning combinations pay a prize. In respect of a base game result shown in Figure 3a of the drawings, the player is paid a prize for 3 x K appearing on payline one of the game. As no bonus symbols were revealed, no bonus prizes or substitute prizes are awarded.

Upon placing the next bet, the player again causes the reels 18 to spin and the result is as shown in Figure 3b of the drawings with two bonus symbols occurring. Due to the presence of the bonus symbol 42 on the third reel, a prize is paid for 3 X 10 on payline five with the bonus symbol 42 on the third reel 18 substituting. The two bonus symbols 42 are then held for the next ten bought games and, as shown in Figure 3c of the drawings, when the reels 18 are re-spun after a bet has been placed by the player, the bonus symbols 42 are highlighted. This occurs for all spins of the reels 18 during which the bonus symbols 42 remain in position.

When the reels 18 are spun, the bonus symbols 42 appear to "lift" off their reels 18 and remain in place on the screen 16. The highlighted bonus symbols 42 thus appear to be superimposed over the underlying reels 18 so that the effect is of the reels 18 spinning behind the bonus symbols 42. To enhance this effect, the bonus symbols 42 may have degree of transparency.

In Figure 3c of the drawings, the result of the spinning of the reels is that the player is awarded a prize for 4 x 9 on payline two with the bonus symbol 42 on the third reel 18 acting as a substitute.

When the player places a bet and spins the reels 18 for the next game, a further bonus symbol 44 is spun up as shown in Figure 3d of the drawings. It too will be held in place for the following ten, bought games.

5 As there were no prize winning combinations on any of the five active paylines, no prizes are awarded for the game shown in Figure 3d of the drawings.

For the next game, all three bonus symbols, being the two bonus symbols 42 and the bonus symbol 44 are held while the reels 18 are spun. For the game shown in Figure 3e of the drawings, a prize is paid for 4 x J on  
10 payline two and 5 x Q on payline one. After the tenth game following the game in which the two bonus symbols 42 occurred, those two bonus symbols 42 which had been held disappear. However, the bonus symbol 44 will continue to be held for another two games. Hence, when the player next causes the reels 18 to spin, the result is as shown in Figure 3f of the drawings.  
15 In this game, there are no prize winning combinations on any of the five active paylines and, accordingly, no prizes are awarded.

It is also to be noted that the bonus symbol may overlie more than one underlying symbol on its associated reel 18, substituting for each underlying symbol..

20 Referring now to Figures 4 and 5a to 5c of the drawings, a second embodiment of the game 16 played on the gaming machine 10 is described. With reference to Figures 3a to 3f of the drawings, like reference numerals refer to like parts unless otherwise specified.

25 In this embodiment of the invention, a display screen of a base game result is shown at 46 in Figure 4 of the drawings.

Three scatter symbols 48 are spun up. A prize is paid for the three scatter symbols 48. Further, the presence of the three scatter symbols 48 constitutes a trigger condition. The trigger condition commences ten free games during which all bonus symbol 42, 44 will be held. The bonus  
30 symbols 42, 44 substitute for all underlying symbols, except the scatter symbols 48. The symbols underlying the bonus symbols 42, 44 are still applicable such that, if a scatter symbol is spun up and appears beneath the bonus symbol, it may still award scatter wins and, where applicable, add another ten free games to those remaining, as will be described in greater  
35 detail below.

Figure 5a shows a display screen 50 of a first free game in the series of free games. Because the bonus symbol 42 acts as a substitute symbol, it substitutes in its position and, accordingly, a prize is paid for  $5 \times Q$ .

5 The bonus symbol 42 is held in place for the nine remaining free games and remains visible.

After the second free game, a display screen 52 of which is shown in Figure 5b of the drawings, a symbol which underlies the bonus symbol 42 is visible through the bonus symbol 42. In this case, a J symbol 54 is visible. No prize winning combinations result in the second free game and,  
10 accordingly, no prizes are awarded.

In the third free game, a display screen of which is shown as 56 in Figure 5c of the drawings, a second bonus symbol 44 is spun up on the fourth reel 18. The initial bonus symbol 42 remains in place and a symbol of the second reel 18 is spun up behind the bonus symbol 42 to be visible through  
15 the bonus symbol 42. In this case, a further three scatter symbols 48, one being behind the bonus symbol 42, are spun up. This serves as a further trigger condition resulting in a further series of free games being awarded. The free games of the further series of free games are added to any remaining free games from the initial series of free games.

20 Accordingly, in the present example, the further ten free games are added to the remaining seven free games from the initial series of free games. For all of the seventeen free games which remain, the two displayed bonus symbols 42, 44 will remain in place over the reels 18. It will be appreciated that any bonus symbol (not shown) which is spun up in any subsequent free  
25 games will also be held for the remaining games of the sum of the initial series of free games and the further series of free games plus any additional series of free games which may arise.

In the game illustrated in Figure 5c of the drawings, the bonus symbol 42 acts as a substitute symbol so that a prize is paid for  $4 \times J$ . However, the  
30 underlying scatter symbol 48 still applies; hence the awarding of the further series of free games.

Hence, it is an advantage of the invention that a feature is provided which the applicant believes will enhance player interest in games played on the gaming machine 10.

35 It will be appreciated by persons skilled in the art that numerous variations and/or modifications may be made to the invention as shown in the

specific embodiments without departing from the spirit or scope of the invention as broadly described. The present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive.



## CLAIMS:

1. A gaming machine having a display means and a game control means arranged to control images displayed on the display means, the game control means being arranged to play a spinning reel game wherein one or more random events are caused to be displayed on the display means and, if a predefined winning event occurs, the machine awards a prize, the gaming machine being characterized in that, when at least one special symbol appears on the display means, said at least one special symbol is held in a superimposed representation in that position for at least one further game while at least that reel carrying the, or each, special symbol is re-spun for said at least one further game.
2. The gaming machine of claim 1 in which said at least one special symbol is carried into position on one of the reels and remains in position to be superimposed over an underlying symbol of that reel when the reel is re-spun.
3. The gaming machine of claim 2 in which said at least one special symbol is at least partially transparent so that an underlying symbol is visible beneath it.
4. The gaming machine of any one of the preceding claims in which more than one special symbol appears at any one time and more than one special symbol remains in its position for a series of games.
5. The gaming machine of any one of the preceding claims in which said at least one special symbol, when it occurs in a bought, base game is held for a predetermined number of succeeding bought, base games.
6. The gaming machine of any one of claims 1 to 4 inclusive, in which said at least one special symbol is held following the occurrence of a predetermined trigger condition, said trigger condition being associated with said at least one special symbol and said trigger condition commencing a series of free games during which all special symbols that are spun up are held.

7. The gaming machine of any one of claims 1 to 4 inclusive, in which a trigger condition, independent of the special symbols, commences a series of free games during which all special symbols that are spun up are held.

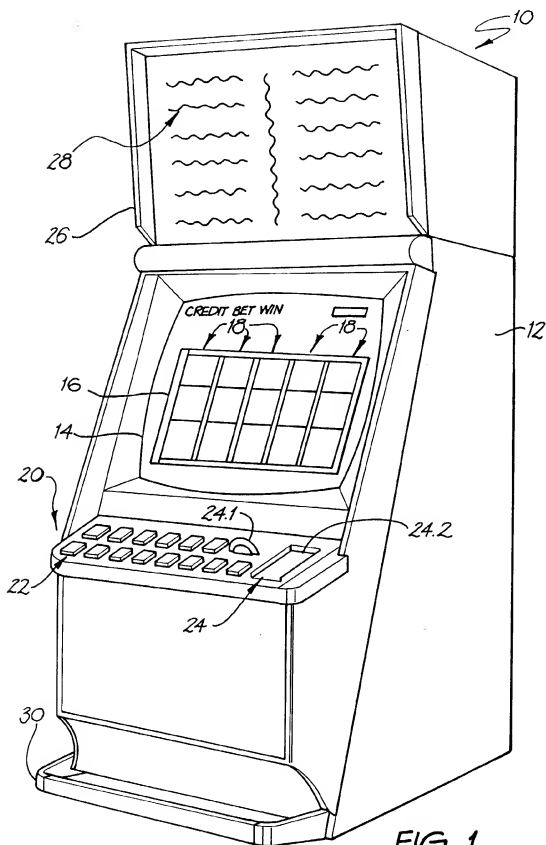
5 8. The gaming machine of claim 6 or claim 7 in which the held special symbols are superimposed over the underlying spinning reels when the reels are spun for succeeding games in the series of free games.

10 9. The gaming machine of claim 8 in which any special symbol spun up in any one game of the series of free games is held for a predetermined number of following games in the series of free games.

15 10. The gaming machine of claim 9 in which, if the trigger condition re-occurs in one of the games of the series of free games, a further series of free games is awarded.

11. The gaming machine of claim 10 in which the free games of the further series of free games are added to any remaining games of a preceding series of free games.

20 12. The gaming machine of claim 11 in which any special symbol held during a game of said preceding series of free games is also held for at least certain games of the further series of free games.

**FIG. 1**

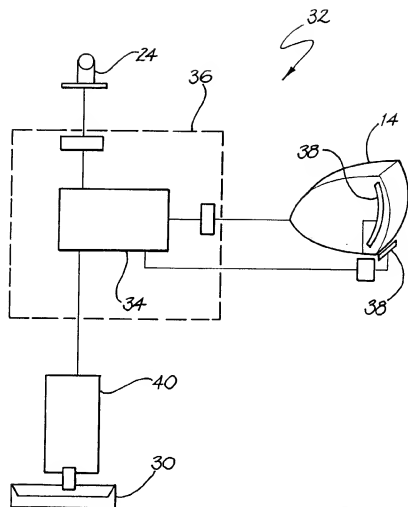


FIG. 2

A 3x5 grid of playing cards. The top row contains J, J, 10, Q, J. The middle row contains K, K, K, 9, 9. The bottom row contains Q, 10, J, 10, Q. A squiggly arrow labeled 16 points to the right side of the grid. Two curved arrows labeled 18 point to the top two pairs of cards (J, J and Q, J).

J	J	10	Q	J
K	K	K	9	9
Q	10	J	10	Q

FIG. 3a

A 3x5 grid of playing cards. The top row contains K, Q, BONUS, J, K. The middle row contains 9, 10, J, Q, BONUS. The bottom row contains 10, K, 10, K, Q. A squiggly arrow labeled 16 points to the right side of the grid. Two curved arrows labeled 18 point to the top two pairs of cards (K, Q and J, K). A bracket labeled 42 spans the top three cards (K, Q, BONUS). Another bracket labeled 42 spans the middle two BONUS cards (BONUS, BONUS).

K	Q	BONUS	J	K
9	10	J	Q	BONUS
10	K	10	K	Q

FIG. 3b

9	9	BONUS	9	10
K	Q	10	Q	BONUS
10	J	K	J	K

FIG. 3c

Q	K	BONUS	J	K
J	Q	BONUS	10	BONUS
10	10	J	Q	10

FIG. 3d

J	J	BONUS	J	9
Q	Q	BONUS	Q	BONUS
10	9	J	10	10

FIG. 3e

K	Q	J	K	Q
J	K	BONUS	9	10
Q	10	Q	Q	K

FIG. 3f

A 3x5 grid of playing cards. The cards are: Row 1: 10, S, 9, Q, S; Row 2: J, Q, S, J, K; Row 3: 9, 10, K, 10, Q. Callout 18 points to the top edge of the first and third columns. Callout 48 points to the top edge of the second and fifth columns. Callout 46 points to the right edge of the grid.

10	S	9	Q	S
J	Q	S	J	K
9	10	K	10	Q

FIG. 4

A 3x5 grid of playing cards. The cards are: Row 1: Q, BONUS, Q, Q, Q; Row 2: 9, J, K, 9, 10; Row 3: K, 9, 10, K, 9. Callout 18 points to the top edge of the first and third columns. Callout 42 points to the top edge of the second column. Callout 50 points to the right edge of the grid.

Q	BONUS	Q	Q	Q
9	J	K	9	10
K	9	10	K	9

FIG. 5a



K	BONUS	Q	9	10
Q	10	K	10	K
J	K	J	K	S

FIG. 5b

J	BONUS	J	J	K
K	K	Q	BONUS	10
S	J	S	10	9

FIG. 5c

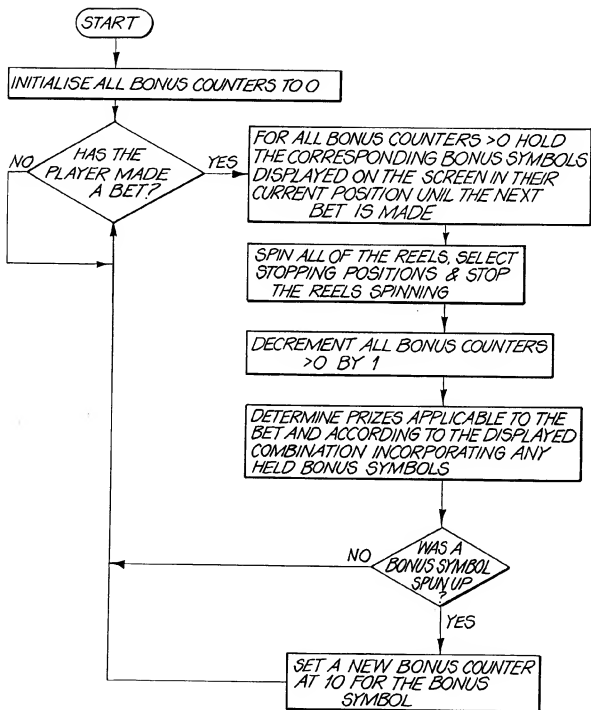


FIG. 6

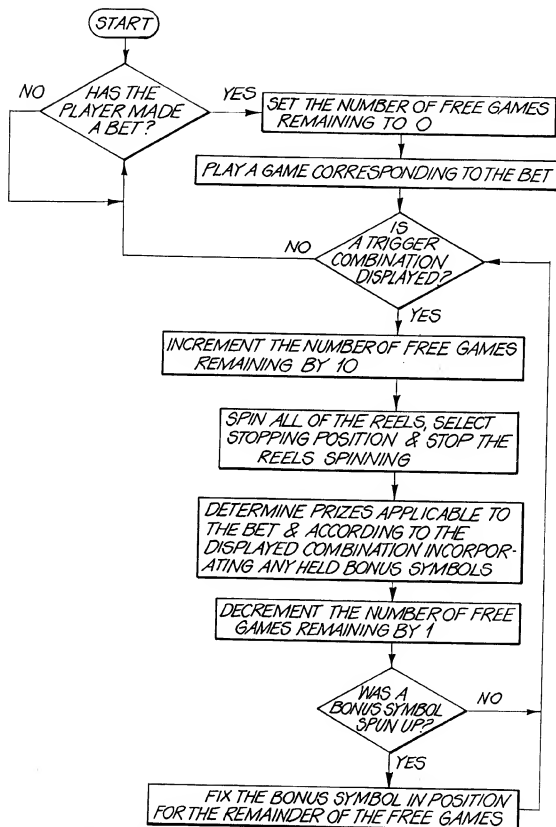


FIG. 7

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU01/00323

**A. CLASSIFICATION OF SUBJECT MATTER**Int. Cl. <sup>7</sup>: A63F1300; G07F 17/34

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC: GLOBAL

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
INTERNET

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPAT: gaming,poker,fruit,slot,machine,display,symbol,overlap,superimpose,satiation,hold

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	AU-A-43488/99 (ARISTOCRAT LEISURE INDUSTRIES PTY LTD) 2 March 2000 whole document	1-12
Y	GB 2 243 236-A-(Coinmaster Manufacturing Limited) 23 October 1991 whole document	1-12
A	GB 1 528 507-A-(AUTOMATIC (FRUIT) DESIGNS LTD) 11 October 1978 whole document	1-12

☐

Further documents are listed in the continuation of Box C

☒

See patent family annex

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such

combination being obvious to a person skilled in the art  
document member of the same patent family

"&amp;"

Date of the actual completion of the international search

17 April 2001

Date of mailing of the international search report

24 April 2001

Name and mailing address of the ISA/AU

AUSTRALIAN PATENT OFFICE  
PO BOX 200, WODEN ACT 2606, AUSTRALIA  
E-mail address: pct@ipaustrialia.gov.au  
Facsimile No. (02) 6285 3929

Authorized officer

JAMES WILLIAMS

Telephone No : (02) 6283 2599

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
**PCT/AU01/00323**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report			Patent Family Member
AU	43488/99	NONE	
GB	1528507	NONE	
GB	2243236	NONE	
			END OF ANNEX